

Cum denique ex observatione nostra manifestum sit, revera tinctam esse gemmam Chalcedoniam, quamvis fortuito acciderit, neque repetito processu simile quid evenerit, merebitur tamen meditationem, an ex astrorum fluxu, aliave abscondita potius vi venerit, & tentamen, an ex mixtura salium & succorum acrium possit imitando produci ejusmodi Tinctura, & quidem sine Igne, ut splendor & Pelluciditas gemmæ non destruat, durities autem maneat, adeoque ipsa gemmæ pretiositas non tantum servetur, sed & per tincturam novam crescat.

Hujus Tincturæ figuram & modum, si forte quem delectet, addere placuit, qualis noctu opposita Candelæ visa fuit, aliquomodo nec satis accurate delineatum. Tab. 1. Fig. 6.

A CATALOGUE of *Simple* and *Mixt Colours*,
with a *Specimen* of each Colour prefixt to its proper
Name: By R. WALLER, Fellow of the Royal
Society.

HAVING sometime since seen a TABLE of the *Simple Colours* made use of in *Limning* and *Painting*, Printed in the Year 1680, at *Stockholm*; I have here endeavoured to give a more *Philosophical*, and useful one by the addition of some *mixt Colours*: Not that I pretend to give the *Shades* of all the *mixt Colours*, which were indeed infinite as the Compositions and Proportions of them may be unlimited; but I have mixt each of the *Simple Yellows* and *Reds* with each of the *simple Blues*, and these *Mixtures* give most of the *mean Colours*, viz. *Greens*, *Purples*, &c. To know what each of these *mixt Colours* is compounded of, you need but look to the Top of the *Table* directly over the *Colour* enquired after, where you may find the One *Ingredient*, and at the Side in
the

the same Row, the other. As the *Poppinjay-green* is made of *Blew Bice* and *Cam'odia*, an equal *weight* of each. I chose *Weight* rather than *Measure*, because the heavier *Colours* have generally the more *Body*, and therefore come nearest to an *Equality* that way. I have added the *Latin, Greek, French,* and *English* Names that I knew, which the more skilful *Reader* may supply where wanting. I propose to my self that this *Table* will be of some use and advantage in the describing of the *Colours* of *Natural Bodies*, which may be done by this *Table*, and represented more nearly to the *Reader* provided with one of the same *Tables*, with less ambiguity, I think, than is usual: A *Standard* of *Colours* being yet a thing wanting in *Philosophy*. Thus to describe a *Plant*, it may be seen which of the *simple* or *mixt Colours* comes nearest to it, and then the *Word* affixt to that *Colour* may be made use of, which the *Reader*, if desirous, may look in his *Table*, and find together with the *Pattern* thereof.

The Table of Colours is to be Inserted after this Leaf, which ought to be done with a Guard and a White-leaf between after the Book is bound, lest otherwise the Colours by beating stick together.

A short

*A short Description of the Simple Colours specified
in this Table.*

1. *Spanish White* made of *Chalk* and *Alumn* burnt together.

2. I take the *Lapis Armenius* to be the blew *Bice* sold in the Shops, for it is light and friable; formerly brought out of *Armenia*, now from the Silver Mines of *Germany*, called *Melochites*, in high Dutch *Bergblaw*.

3. *Ultramarine* is made of the blewest *lapis Lazuli*, which is freest from Gold-veins, by Calcination; the method of preparing it being too large for this place, may be seen in Doctor *Merret's* ingenious Notes upon *Neri's* Art of Glass, lib. 7.

4. *Smalt* is made of *Zaffer* and *Pot-ashes*, calcined together in a Glass-furnace. Dr. *Merret* ib.

5. *Litmase*, or *Litmose*, I suppose the Juice of a Plant.

6. *Indigo* said by *Pliny* to be brought from *India*: a kind of Mud adhering to the Froath about Reeds, and that when tryed with a Coal, the true burns with a Purple-flame, and smells of the Sea: *Linschoten* says, it is called *Anil*, that it grows in *Cam aia*, and is a Plant like *Rosemary*, which is gathered and dried, then wetted with fair Water, and beaten to a Mud; this Operation being repeated, it is dried and fitted for use, cap 69.

7. *Indian Ink*, its Use known to *Pliny*, tho' not its Composition; which is yet undiscovered, except it should be burnt Rice, as hath been thought.

So much for the *Blens* at the Head of our Table; the *Yellows* and *Reds* made use of, are these that follow.

1. *Ceruse* is the Rust of *Lead* made by a vaporous Calcination; *Pliny* writes thus of it in the 34. lib. cap. 18. *Ceruse*, or *Esmythum* is made in the Plummers Shops; of small Plates

Plates of Lead laid upon a Vessel of very strong Vinegar, what falls into the Vinegar is taken out, and dried in the Sun : and in the 35 Book, Chap. 6. he says it was made at Rome of burnt *Mar le-flint* quench'd in Vinegar.

2. *Masticot* is a kind of improper *Calx* of *Tin*.

3- *Gutta Gambiae*, or *Cambodia*, the inspissated Juice of a Plant, not well known, it comes from both the *Indies*. Some think it the Juice of *Euphorbium*; others *Scammony*, or *Tithimal*; others *Ricinus*; others refer it to the greater *Cataputia*, *Esula*, or the Flowers of the *Indian Ricinus*, and will have it coloured with *Turmerick*: as *Scroder*.

4. *Oker* a kind of Natural Earth, there are two sorts thereof, the one Native formerly brought out of *Attica*, now from *Dacia* and *Hungaria*, and from many places of *England*, especially in the Forrest of *Dean*: The other a factitious substance of *Lead* burnt and quench'd in *Vinegar*. In *Pliny's* time it was made of *Rubrica*, or *Reddle* burnt.

5. *Orpiment*, a fat inflammable Mineral, justly ranked amongst *Poysons* for its extream Corrosive quality. *Pliny* says it was dug up in *Syria* on the Surface of the Earth; and that the Emperor *Caligula* had hopes of getting Gold out of it; wherefore he caused 14 Pounds of it to be tryed, which afforded him very good Gold, but in so small a Proportion, that he lost by the tryal.

6. *Umber* is a Native Earth.

7. *Red-lead*, a Colour unknown to the *Antients*, made of *Litharge* or burnt Lead by a Reverberatory Calcination, or of *Ceruse* put in a Platter over the Fire, which must be continually stirred till it has acquired a *Red-lead* colour. Dr. *Charlton de Foss*.

8. *Burnt Oker* is the common yellow *Oker* burnt in the open fire.

9. *Cinnabar* or *Vermillion*. There are two sorts; Native or the *Minium* of the Ancients, which is the Mineral that yields *Quicksilver*; whereof, and of *Sulphar* it chiefly consists,

it is found in the Mines of *Istria*. This Colour was among the Ancient Romans used to sacred Purposes, and on Festivals *Jupiters* Face was painted therewith, as likewise the Bodies of those that entred in Triumph. The factitious *Cinnabar* is that which we now use; and is made by a sublimation of *Mercury* and *Sulphur*.

10. *Carmin* made of *Cochineel*.

11. *Lake*, thought to be an *Arabick* word: It is made of Flocks dyed, or shavings of *Scarlet-cloath*, or of the *Cochineel Insect*, or else of *Kermes-berries*, their Tincture being extracted with a Lye of *Pot-ashes*, and then precipitated with a Solution of *Rock-alum*. After the same manner a *Lake* may be made of any Plant or Flower; a more exact Information touching this matter, may be had in Mr. *Boyle's Treatise of Colours*, Part. 3. Exp. 49. and Dr. *Merret's Notes on Neri's Art of Glass*. lib. 7. There is also another sort of *Lake* made of *Gum-lac*, by extracting its Tincture with *Urine*. Dr. *Merret*, *ibidem*.

12. *Sanguis Draconis* is the Gum of a Tree which looks like dried Blood, 'tis brought out of several places in the *East Indies*; and the Tree which produces it is very well described in the *Hortus Malabaricus*.

13. *English Reddle* or *Ruddle*, is found in many places of *England*, amongst the rest near *Witney* in *Oxford-shire*. Dr. *Plot's Hist. of Ox.* c. 3.

14. *Lamp-black*, by *Pliny* thus described: It is made of the Soot of *Resin* or *Pitch* burnt, Houses being built on purpose for it, that keep in the Smoak. Its Use is in Writing-books, lib. 35. cap, 6.

In usum Exterorum visum est Præconiunculam hanc atque Catalogum Colorum Latinitate donare.

CUM aliquando viderim *Nomenclaturam* Colorum simplicium Trilinguam *Stockholmie* editam per *D. St. Brenner*; mihi in mentem venit opus me præstiturum *Genio*, ac fini *Regiæ Societatis*, nec absolum, nec inutile, si talis, non modo *Simplicium*, verum etiam *Mixtorum Colorum Tabula* conficiendæ modum excogitare potuerim: magis autem fore gratum si cuique *Vocabulo Specimen Coloris* apponi possit; quod Amice *Lector* hic tandem effectum vides.

Constructionem Tabula quod spectat, in *Capite* omnes *Cærulei* Simples, & *Primarii* apponuntur, & ad *Latus* primo *Luteos*, ac deinde *Rubeos* affixos vides, cum *speciminibus* propriis, & *nominibus* in *Officinis* notioribus: Cæteri, viz. *Pallidiores Cærulei*, *Flavi*, *Rufi*que necnon *Virides*, & *Purpurei* omnes, e mixtura *Simplicium* æquis partibus *Orti*, reliquam *Tabula* partem complent. puta *Specimen Colori Heri* eo affixum, compositum est ex æquo pondere *Cyprii* ad *Caput Tabula* videndi, & *Guttæ Gambæ* ad *Latus*, intime *Commixtorum*: Sic dicendum de cæteris. *Speciminibus* etiam adjeci nomina *Latina*, *Græca*, *Gallica*, & *Anglica*, saltem quæ mihi nota; quæ autem desiderantur magis verborum gnarus apponas *Curiose Lector*, ac nostro defectui subministres *Rogo*.

Ad *usum* vero hujusce quod attinet, non leviusculum hinc enaturum confido: restat enim hucusque quid *Desideratum* nempe *justa Colorum statera*. Jam si quis *Plantarum*, vel *Animalium* *Integumentum* describere velit, ope hujus *Tabula* minimo *Labore*, sine ulla *Ambage*, vel *Ambiguitate* rem conficiet, idemque genuinis quasi depictum coloribus, *Lectoris* eadem instructi *Tabula* oculis subjiciet. Exempli gratia, *Gentianelle* flos colore est *azurino*, exterius in *saligneum* vergente, hujusque plantæ folia prope *Herbei* sunt coloris.

Hoc qualecunque *Tentamen* in meliorem partem accipias, studioque nostro tibi subserviendi fruaris *feceliciter*, & *saveas candide*.

Vale.

*Sequitur Pigmentorum Simplicium in hac Tabula exhibit-
torum Descriptio aliqualis.*

1. **C***andidum Hispanicum* fit ex *Creta alba* et *Alumine* in Cru-
cibulo simul calcinatis.

2. *Montanum*, vel *Lapis Armenius*, levis est & friabilis: o-
lim ex *Armenia* deferebatur, hodie vero reperitur in *Germania*
in Argenti fodinis; dicitur etiam *Melochitis*, *Bergelaw*. Scrod.
Pharm. Med. Chym. l. 4. Claf. 4. §. 465.

3. *Cyprium*, vel *Ultramarinum* ex lapide *Lazuli*, seu Cyano
per calcinationem fit. Hujus præparationis methodum cum
nimis tædiosum foret hic percurrere, videas *D. Dris Merreti*
Notas in Art. *Vitrariam Neri*. l. 7. c. 115.

4. *Smaltum* Efficitur calcinando in fornace *Zafferum*, una
cum cineribus clavellatis. Modum exhibet *Ars Vitraria*.
Dr. Merret, lib. 7. cap. 72.

5. *Litmas* vel *Litmos*, uti videtur, succus est plantæ alicu-
jus inspissatus.

Indicum, Authore *Plinio* ex *India* provenit, constans limo
quodam arundinum spumæ adhærescente; probatur carbone,
sincerum enim reddit flammam excellentis purpuræ, ac
dum fumat Odorem Maris redolet, l. 35. c. 6.

A *Linschoten* vero aliter describitur. *Anil*, vel *Indicum*
in regione *Cambaia* fit, ex planta quadam *Rorimarino* simili;
quæ carpitur, & exiccata, aqua denuo humectatur, ac tun-
dendo maceratur, quo facto evaporatur aqua, ac pigmentum
conficitur. *Linschot*. cap. 69.

Hodie vero in insula *Jamaica* et alibi in *Americanis* nostris
Coloniis copiosè provenit, ac ad hunc ferme modum præpa-
ratur.

7. *Atramentum Sinicum* vel *Indicum Plinio*, cui ignotum e-
rat ex quo constabat; neque etiam nobis plane innotuit quid
sit: a quibusdam vero creditur *Oriza* usta.

Hoc sufficiat descriptioni *Cæruleorum* ad Caput *Tabula* positorum. jam Pauca de *Luteis* & *Rubris* subiciam .

1. *Cerussa* est *Ærugo Plumbi* per *Calcinationem* vaporosam. *Diosc.* l. 5. c. 103. De hac ita *Plinius* ; *Cerussa* vel *Psimythium* fit ex laminis *Plumbi* tenuissimis super vas aceti asperrimi impositis, atque ita distillantibus iis, quod in vas decedit, ad solem siccatur, *lib.* 24. cap. 18. Idem testatur aliud genus *Roma* factum, cremato scilicet *Marmoroso* & restincto aceto, l. 35. c. 6.

2. *Masticot* est *Calx* quædam impropria sic dicta ex *Stanno* confecta. *Helm. de Lithi.* c. 1.

3. *Gutta Gamba*, succus inspissatus Plantæ minus notæ; ex *India* utraq; venit, juxta quosdam *Euphorbii*, alios *Ricini* vel *Tithimali*; vel *Scammonii* succus est. Sunt qui ad *Esulam*, & *Cataputiam* majorem, vel ad flores *Ricini* *Indi* originem ejus referunt, coloremq; ex *Curcuma* conciliatum volunt. *Scrod. ib.* l. 4. c. 4. §. 465.

4. *Ochra*, Terræ species : duplex autem habetur, *Nativa*, quæ apud nos multis in locis reperitur, præsertim in *Salto de Dean*. *Factitia* altera ex *Plumbo* adusto & in aceto extincto, facta vero est tempore *Plinii* ex *Calcinata Rubrica* : *Plin.* l. 35. c. 6.

5. *Auripigmentum*, *Arsenicum*. Minerale est pingue, & inflammabile, jure inter *venena* referendum propter in insignem ejus qualitatem corrosivam. *Plinius* dicit in *Syria* effodi in summa tellure, & olim sperasse *Caligulam Imperatorem*, aurum exinde colligi posse; quamobrem excoqui jussit ad pond *lib.* 14. ex quo purum quidem Aurum elicit, sed tam exigua quantitate, ut experimenti sumptus non rependeret.

6. *Umbria* Terra est *Nativa*.

7. *Minium factitium*, ignotum veteribus; Fit ex *plumbo* per calcinationem reverberatorii; vel ex *Cerussa* in *Patina* super ignem posita, ac continue *Rudicula* agitata, donec colorem *Minii* acquisiverit. *Dr. Charlton* de *fossil.*

8. *Ochra-usta*, *Ochra* est *nativa lutea* nudo igne adusta.

9. *Cinna-*

9. *Cinnabaris* Græcis *Miltos*, duplex est; *Nativa*, *Minium* Veterum: minera vero est e qua excoquitur Hydrargyrum, quæq; ex eo et *Sulphure* plurimum constat. copiose provenit in *Mercurii* fodinis Istriensibus. Color hic apud Veteres *Romanos* in sacros usus adhibebatur, eoq; *Jovis* simulachri faciem diebus festis illinere solebant, ut & *Triumphantium* corpora: *Plinio* veteres citante l. 33. c. 7. Ubi dicit *Romam* solummodo ex *Hispania* advectum fuisse. Altera *Fæstitia* ac nobis usitata, fit ex *Mercurio* cum sulphure sublimato. *Scrod.* l. 3. c. 15.
















































10. *Carmin* fit ex *Coccinella*.

11. *Lacca*, vocabulum creditur *Arabicum*, efficitur autem *Lacca* hæc ex *Coccino*, ex floccis *Scarлата* tinctis, vel ex *Coccinella*, vel ex granis *Kermes*, Lixivio *cineram clavellatorum* extrahendo tincturam, quæ deinde solutione *Aluminis Rupei* præcipitatur: pari modo *Vegetalium* quorumvis *Laccam* extrahas. Informationem pleniorẽ cupiens adeat. *Nob. D. Boyle Tract. de Color. Part. 3. Exp. 49. et Merreti Notas in Art. Vit. Neri. l. 7. c. 116. 119.* Alia etiam datur *Lacca* ex *Gummi-lac*, cujus tinctura *Urina humana* extrahitur. *Merret; ib.*

12. *Sanguis Draconis*, lachryma arboris cujusdam instar sanguinis Exiccati concreta; Ex *India* orientali advehitur, et arbor e qua Lachryma hæc exudat accurate describitur in *Hortu Malabarico*.

13. *Rubrica Anglica*, in multis *Anglie* locis reperitur.

14. *Atramentum Fuliginosum*, nihil aliud est quam fuligo *Resinæ*, vel Picis concremata collecta, qua propter officinas ædificavere fumum illum non emittentes; olim ad Atramentum Scriptorium in usu erat. *Plin. l. 35. c. 6.*

Tabula Colorum Physiologica tam Mictorum quam Simplicium Quadrilinguis una cum Speciminibus adjectis Regiæ Societati Londinensi humillime D.D.D. a Ric. Waller S.R.S.				Ca-----ru-----le-----					
				Candidū Hispan.		Montanum		Cyprium	
 Niveus Snow wh				 Glaucinus Watson				 Cyaneus ΚΥΑΝΕΟ	
				Ca-----ru-----le-----					
 Argenteus Ἀργυρεο Silver Co.				 Purcoisinus Turcos Co.		 Cenileus ΤΑΟΚΥΔΕΟ. Skie Col			
ces				Lutei mixti		Vi-----ri-----			
 Limoneus Limon Co				 Puleus Straw Co.		 Cymatilis Wave Co.		 Saligineus ΟΙΣΥΙΝΟ Willow g.	
 Aureus Χρυσοειδής Colour dor. Gold Col.				 Luteolus. Υόχλωρο Yellowish		 Psillaceus Poppin jay gr.		 Herbeus Grass g.	
 Luteus Τυχρός. C.d'oeuf. Clay Col.				 Electricus. Ηλέχτριον Amber Co.				 Vitreus. Υάλιν Glass Co.	
 Citrinus. Κίτρινος Orange Co				 Byssinus. Βύσσινος Raw Silke Co.					
 Fusais Φαίδς Brun Bronne.				 Subfuscus Dun					
ces				Rubei mixti		Par-----pu-----			
 Igneus, Πύρρειδης C.du feu. Fire Col.				 Gilvus Κίρρος Bricke Co.					
 Ruffus Carret Co.				 Helvus Sorrel.		 Baduis Βάδιος Bay Bay			
 Minialis Μινιώδης du Vermillon.				 Carneus. Σαρκαειδής Carnation.					
 Coccinus. Κόκκινος C.d'Ecarlate. Crimson				 Roseus Ροδός Rosey		 Molochinus Μαίχινος Mallow Co		 Ostrinus Purple Roy.	
 Rubinus Ruby-red.				 Caryophyllus Pink Col.		 Persicus Peach Col.		 Amathistinus Amath	
 Sanguineus. Αιμοειδής C.du sang. Blood-red									
 Ferrugineus. Σιδηροειδής Rust Co.								 Baeticus Bronn	
 Piceus. Πίστινος C.du poix Pitchy.				 Griseus Gray		 Canus. Πόλιος Hoary		 Cinereus. Τεφρώδης Ash-col	

----- i ----- Sim ----- ple ----- ces									
		<i>Smalt</i>		<i>Litmase</i>		<i>Indicum</i>		<i>Atramentum Sinicum</i>	
ΚΥΛΥΕ ©		<i>Lazurius.</i> <i>C. d'Azur, Azure</i>		<i>Nilaceus</i> Ίλνσιβος <i>Violet C.</i>		<i>Indicus.</i> Ίνδικος		<i>Coracinus</i> Κοράκιν © <i>Raven C.</i>	
----- i ----- Mi ----- x ----- ti									
ΙΟΚΥΛΥΕ © <i>kie Col.</i>		<i>Hijacinthinus</i> Ίακινθίνος <i>Jacinth Co.</i>						<i>Plumbus</i> <i>Co. de Plomb, Lead Co.</i>	
----- des ----- Mi ----- x ----- ti									
ΠΟΥΙΝΟ <i>Willow gr.</i>		<i>Thalassinus</i> <i>Sea gr.</i>		<i>Invidus</i> <i>Black & Blue</i>				<i>Higellus</i> Ίγομέλας <i>Blackish</i>	
<i>Graps gr.</i>		<i>Porraceus</i> Πόρσιβος. <i>Seeke Co.</i>							
ΥΑΛΙΟ <i>Glass Co.</i>									
						<i>Murinus</i> <i>Mouse Co.</i>		<i>Castaneus</i> <i>Chestnut</i>	
----- e ----- v ----- Mix ----- ti									
								<i>Pullus</i> <i>Earth Co.</i>	
								<i>Ethiopicus.</i> Εθιοπ <i>Negro-Black</i>	
				<i>Livido-purpureus</i> <i>Grie-de-Lion</i>				<i>Fuliginus.</i> Λιγνυδίνος <i>Soot C.</i>	
<i>urple Roy.</i>		<i>Dibaphus</i> <i>Purple in grain</i>		<i>Purpureus.</i> Πορφύρεο <i>C. de Pourpr Purple.</i>		<i>Atrabapticus</i>			
<i>ue Amath</i>		<i>Romaceus</i>						<i>Furvus</i>	
								<i>Prebus</i>	
<i>Brown</i>						<i>Hiberus</i> <i>More' Murrey</i>		<i>Ater</i> <i>Coal-black</i>	
ΦΡΥΔΙΝΣ <i>sh-col</i>		<i>Fervus</i> <i>Iron-gray</i>		<i>Ubidus</i> <i>Dark-gray</i>				<i>Niger.</i> Μέλαις <i>Black</i>	

Date		Time		Place		Weather		Remarks		Remarks	
Day	Month	Year	Hour	Minute	Second	Direction	Force	Clouds	Temperature	Humidity	Wind
1	Jan	1900	10	15	00	SE	10	100	65	80	SE
2	Jan	1900	11	20	00	SE	12	100	65	80	SE
3	Jan	1900	12	25	00	SE	14	100	65	80	SE
4	Jan	1900	13	30	00	SE	16	100	65	80	SE
5	Jan	1900	14	35	00	SE	18	100	65	80	SE
6	Jan	1900	15	40	00	SE	20	100	65	80	SE
7	Jan	1900	16	45	00	SE	22	100	65	80	SE
8	Jan	1900	17	50	00	SE	24	100	65	80	SE
9	Jan	1900	18	55	00	SE	26	100	65	80	SE
10	Jan	1900	19	00	00	SE	28	100	65	80	SE
11	Jan	1900	20	05	00	SE	30	100	65	80	SE
12	Jan	1900	21	10	00	SE	32	100	65	80	SE
13	Jan	1900	22	15	00	SE	34	100	65	80	SE
14	Jan	1900	23	20	00	SE	36	100	65	80	SE
15	Jan	1900	24	25	00	SE	38	100	65	80	SE
16	Jan	1900	25	30	00	SE	40	100	65	80	SE
17	Jan	1900	26	35	00	SE	42	100	65	80	SE
18	Jan	1900	27	40	00	SE	44	100	65	80	SE
19	Jan	1900	28	45	00	SE	46	100	65	80	SE
20	Jan	1900	29	50	00	SE	48	100	65	80	SE
21	Jan	1900	30	55	00	SE	50	100	65	80	SE
22	Jan	1900	31	00	00	SE	52	100	65	80	SE
23	Jan	1900	32	05	00	SE	54	100	65	80	SE
24	Jan	1900	33	10	00	SE	56	100	65	80	SE
25	Jan	1900	34	15	00	SE	58	100	65	80	SE
26	Jan	1900	35	20	00	SE	60	100	65	80	SE
27	Jan	1900	36	25	00	SE	62	100	65	80	SE
28	Jan	1900	37	30	00	SE	64	100	65	80	SE
29	Jan	1900	38	35	00	SE	66	100	65	80	SE
30	Jan	1900	39	40	00	SE	68	100	65	80	SE
31	Jan	1900	40	45	00	SE	70	100	65	80	SE
32	Jan	1900	41	50	00	SE	72	100	65	80	SE
33	Jan	1900	42	55	00	SE	74	100	65	80	SE
34	Jan	1900	43	00	00	SE	76	100	65	80	SE
35	Jan	1900	44	05	00	SE	78	100	65	80	SE
36	Jan	1900	45	10	00	SE	80	100	65	80	SE
37	Jan	1900	46	15	00	SE	82	100	65	80	SE
38	Jan	1900	47	20	00	SE	84	100	65	80	SE
39	Jan	1900	48	25	00	SE	86	100	65	80	SE
40	Jan	1900	49	30	00	SE	88	100	65	80	SE
41	Jan	1900	50	35	00	SE	90	100	65	80	SE
42	Jan	1900	51	40	00	SE	92	100	65	80	SE
43	Jan	1900	52	45	00	SE	94	100	65	80	SE
44	Jan	1900	53	50	00	SE	96	100	65	80	SE
45	Jan	1900	54	55	00	SE	98	100	65	80	SE
46	Jan	1900	55	00	00	SE	100	100	65	80	SE
47	Jan	1900	56	05	00	SE	102	100	65	80	SE
48	Jan	1900	57	10	00	SE	104	100	65	80	SE
49	Jan	1900	58	15	00	SE	106	100	65	80	SE
50	Jan	1900	59	20	00	SE	108	100	65	80	SE
51	Jan	1900	60	25	00	SE	110	100	65	80	SE
52	Jan	1900	61	30	00	SE	112	100	65	80	SE
53	Jan	1900	62	35	00	SE	114	100	65	80	SE
54	Jan	1900	63	40	00	SE	116	100	65	80	SE
55	Jan	1900	64	45	00	SE	118	100	65	80	SE
56	Jan	1900	65	50	00	SE	120	100	65	80	SE
57	Jan	1900	66	55	00	SE	122	100	65	80	SE
58	Jan	1900	67	00	00	SE	124	100	65	80	SE
59	Jan	1900	68	05	00	SE	126	100	65	80	SE
60	Jan	1900	69	10	00	SE	128	100	65	80	SE
61	Jan	1900	70	15	00	SE	130	100	65	80	SE
62	Jan	1900	71	20	00	SE	132	100	65	80	SE
63	Jan	1900	72	25	00	SE	134	100	65	80	SE
64	Jan	1900	73	30	00	SE	136	100	65	80	SE
65	Jan	1900	74	35	00	SE	138	100	65	80	SE
66	Jan	1900	75	40	00	SE	140	100	65	80	SE
67	Jan	1900	76	45	00	SE	142	100	65	80	SE
68	Jan	1900	77	50	00	SE	144	100	65	80	SE
69	Jan	1900	78	55	00	SE	146	100	65	80	SE
70	Jan	1900	79	00	00	SE	148	100	65	80	SE
71	Jan	1900	80	05	00	SE	150	100	65	80	SE
72	Jan	1900	81	10	00	SE	152	100	65	80	SE
73	Jan	1900	82	15	00	SE	154	100	65	80	SE
74	Jan	1900	83	20	00	SE	156	100	65	80	SE
75	Jan	1900	84	25	00	SE	158	100	65	80	SE
76	Jan	1900	85	30	00	SE	160	100	65	80	SE
77	Jan	1900	86	35	00	SE	162	100	65	80	SE
78	Jan	1900	87	40	00	SE	164	100	65	80	SE
79	Jan	1900	88	45	00	SE	166	100	65	80	SE
80	Jan	1900	89	50	00	SE	168	100	65	80	SE
81	Jan	1900	90	55	00	SE	170	100	65	80	SE
82	Jan	1900	91	00	00	SE	172	100	65	80	SE
83	Jan	1900	92	05	00	SE	174	100	65	80	SE
84	Jan	1900	93	10	00	SE	176	100	65	80	SE
85	Jan	1900	94	15	00	SE	178	100	65	80	SE
86	Jan	1900	95	20	00	SE	180	100	65	80	SE
87	Jan	1900	96	25	00	SE	182	100	65	80	SE
88	Jan	1900	97	30	00	SE	184	100	65	80	SE
89	Jan	1900	98	35	00	SE	186	100	65	80	SE
90	Jan	1900	99	40	00	SE	188	100	65	80	SE
91	Jan	1900	100	45	00	SE	190	100	65	80	SE
92	Jan	1900	101	50	00	SE	192	100	65	80	SE
93	Jan	1900	102	55	00	SE	194	100	65	80	SE
94	Jan	1900	103	00	00	SE	196	100	65	80	SE
95	Jan	1900	104	05	00	SE	198	100	65	80	SE
96	Jan	1900	105	10	00	SE	200	100	65	80	SE
97	Jan	1900	106	15	00	SE	202	100	65	80	SE
98	Jan	1900	107	20	00	SE	204	100	65	80	SE
99	Jan	1900	108	25	00	SE	206	100	65	80	SE
100	Jan	1900	109	30	00	SE	208	100	65	80	SE